
ENVIRONMENTAL Fact Sheet



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WD-DWGB-18-4

2007

Emergency Water Supply Wells for Public Water Systems

When a water supply emergency occurs, a public water system may need to activate an alternate source of drinking water as rapidly as possible to avoid interrupting service to its customers. Simply turning on a pump in an unused well or connecting a new or inactive well to the water system, however, can potentially threaten public health if measures are not taken to verify that the quality of water served to customers is safe to drink. For this reason, the New Hampshire Department of Environmental Services (DES) has developed the following guidelines for the activation of emergency water supply sources.

DES recognizes two types of emergency sources: emergency wells and interim emergency wells.

Emergency Wells

An emergency well is a well that is present at the system but is not currently used for drinking water supply. It is often a well that was formerly an active water supply well for the system or may have previously been approved and not activated. It also may or may not be physically connected to the water distribution system. This type of well, although maintained, is not used on a regular basis to meet water supply demands; is not routinely sampled for water quality; and is only utilized when a primary production well fails due to mechanical or water quality problems. The following steps must be taken prior to activating an emergency well:

- Flush and purge rarely used water lines and disinfect the well and water lines following DES's fact sheet WD-DWGB-4-3 "[Disinfection Public Water Systems.](#)"
- Take a sample of the water withdrawn from the well for analysis for bacteria and nitrate.
- Once the results of the bacteria and nitrate testing are known, contact DWGB to receive permission to use the well. This request does not need to be in writing.
- Once the emergency has ended, the well must be deactivated and DES notified.

When not in use, emergency wells must be maintained in accordance with Water Well Board rule We 603.02, Well Maintenance, Inactive Wells. These rules require that a sanitary seal be maintained between the casing and the well cover and that the well casing not be cut off below ground surface. If the emergency becomes an ongoing problem, then the water system must seek well siting approval for permanent use of the well in accordance with the community well siting rules, and other applicable administrative rules.

Interim Emergency Wells

An interim emergency well is a newly constructed or previously non-approved well that the water system must bring online in response to an emergency situation or event that has impacted the water system's ability to provide an adequate quantity or quality of water. These events are commonly catastrophic or unforeseen, and can not easily be remedied through other measures, e.g., water conservation, storage management or treatment; as such, it may be necessary to immediately connect the emergency well to the water system under an interim approval, before the formal well siting and approval process is completed. Following re-establishment of water service, the interim emergency well would be subject to the formal well siting and permitting process in order to be used on a regular basis.

In order to obtain interim emergency well approval the following steps must be taken:

1. Request an interim emergency well approval in writing and document the emergency, as outlined above, which necessitates use of the well.
2. Compile the materials below and submit them to DES.
 - Town tax map showing all lots owned or controlled by the water system.
 - Copies of all easements held by the water system on land it does not own.
 - A sketch of the proposed site showing all land uses, structures, roadways, topography, and hydrography in the vicinity of the proposed well.
3. Meet DES staff on site to review the well location, surface and floodplain setbacks, and sanitary protection area (SPA). During this site visit, staff will determine if the well site meets SPA requirements. If it does not, the water system must document measures to improve the SPA that will reduce the risk of contamination.
4. Demonstrate that bacteria are absent from the well and nitrate concentrations meet current drinking water standards.
5. Document that the well was constructed in accordance with We 600 and 700, and sampled for all Safe Drinking Water Act parameters required by Env-Ws 310-316.

Once these steps have been completed, interim approval will be granted for the emergency well and will be valid for a period of 60 days. In that time period, the water system is expected to submit a final report to permit the emergency well for permanent use in compliance with the community well siting rules. If a final report is not submitted, the well must be disconnected from the system 60 days after interim approval was granted.

For Additional Information

Please contact the Drinking Water and Groundwater Bureau at (603) 271-2513 or dwgbinfo@des.state.nh.us or visit our website at www.des.nh.gov/dwgb. All of the bureau's fact sheets are on-line at www.des.nh.gov/dwg.htm.

Note: This fact sheet is accurate as of October 2007. Statutory or regulatory changes, or the availability of additional information after this date may render this information inaccurate or incomplete.